

CHANGEU.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

8130.2D CHG 3

11/30/01

SUBJ: AIRWORTHINESS CERTIFICATION OF AIRCRAFT AND RELATED PRODUCTS

- 1. PURPOSE.** This change incorporates a revision to the operating limitations issued to experimental amateur-built aircraft.
- 2. DISTRIBUTION.** This change is distributed to the Washington headquarters branch levels of the Aircraft Certification Service, Flight Standards Service, and the Regulatory Support Division; to the Aviation System Standards Office; to the branch level in the Aircraft Certification Directorates and regional Flight Standards Divisions; to all Aircraft Certification Offices; to all Manufacturing Inspection District and Satellite Offices; to all Flight Standards District Offices; to the Aircraft Certification Branch and Flight Standards Branch at the FAA Academy; to the Brussels Aircraft Certification Division and Flight Standards Staff; to applicable Representatives of the Administrator; and to all International Field Offices.
- 3. EXPLANATION OF CHANGE.** In response to a National Transportation Safety Board recommendation, experimental amateur-built condition inspections must include criteria to ensure that cockpit instruments are clearly marked and placed for easy reference, and needed placards are installed. Additionally, condition inspections must include criteria to ensure that system essential controls are clearly marked and provide for ease of operation. Experimental amateur-built operating limitation number (22) has been amended to include these criteria.
- 4. DISPOSITION OF TRANSMITTAL.** After filing the attached pages, this change transmittal shall be retained.

PAGE CONTROL CHART

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Initiated By: AIR-200

(14) This aircraft must display the word EXPERIMENTAL in accordance with § 45.23(b).

(15) This aircraft is prohibited from aerobatic flight; i.e., an intentional maneuver involving an abrupt change in the aircraft's attitude, an abnormal attitude, or abnormal acceleration not necessary for normal flight.

NOTE: If the builder states the aircraft is capable of aerobatic flight, limitation 16 will be used in lieu of limitation 15.

(16) This aircraft may conduct aerobatic flight in accordance with the provisions of § 91.303. Aerobatics shall not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable and in compliance with § 91.319(b). The aircraft may only conduct those aerobatic flight maneuvers that have been satisfactorily accomplished during flight testing and recorded in the aircraft maintenance records by use of the following or a similarly worded statement: **"I certify that the following aerobatic maneuvers have been test flown and the aircraft is controllable throughout the maneuver's normal range of speeds and is safe for operation. The flight tested aerobatic maneuvers are:** _____, _____, _____, and _____."

NOTE: Aerobatic flights may be permitted in the assigned test area. The applicant should be advised that aerobatics or violent maneuvers should not be attempted until sufficient flight experience has been gained to establish that the aircraft is satisfactorily controllable. These operating limitations may be modified to include only those aerobatics/maneuvers that have been satisfactorily accomplished and recorded in the aircraft records during the flight test period. These aerobatic maneuvers should be permitted upon leaving that assigned test area. Appropriate limitations identifying the aerobatics/maneuvers and conditions under which they may be performed should be prescribed. The certificating inspector may witness aerobatic maneuvers if deemed necessary.

(17) The pilot in command of this aircraft shall hold an appropriate category/class rating. If required, the pilot in command must also hold a type rating per 14 CFR, part 61, or a "Letter of Authorization" issued by an FAA Flight Standards Inspector.

NOTE: This limitation is applicable to any turbojet/turboprop powered aircraft or an aircraft with a maximum takeoff weight exceeding 12,500 pounds, or any other aircraft when deemed necessary. Flight Standards inspectors should refer to Order 8700.1 for further guidance.

(18) The pilot in command of this aircraft shall hold a category/class rating, or an authorized instructor's logbook endorsement. The pilot in command must meet the requirements of § 61.31(e), (f), (g), (h), (i), and (j) as appropriate.

NOTE: This operating limitation applies to most amateur-built aircraft as a standard operating limitation (reference 14 CFR § 61.31(k)).

(19) After incorporating a major change as described in § 21.93, the aircraft owner is required to re-establish compliance with § 91.319(b). All operations will be conducted day VFR in a sparsely populated area. The aircraft must remain in flight test for a minimum of 5 hours. Persons non-essential to the flight shall not be carried. The aircraft owner shall make a detailed log book entry describing the change prior to the test flight. Following satisfactory completion of the required number of flight hours in the flight test area, the pilot shall certify in the records that the aircraft has been shown to comply with § 91.319(b). Compliance with § 91.319(b) shall be recorded in the aircraft records with the following or a similarly worded statement: **"I certify that the prescribed flight test hours have been completed and the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, has no hazardous operating characteristics or design features, and is safe for operation. The following aircraft operating data has been demonstrated during the flight testing: speeds V_{so}_____, V_x_____, and V_y_____, and the weight_____, and CG location_____ at which they were obtained."**

(20) This aircraft shall not be used for glider towing, banner towing, or intentional parachute jumping.

(21) This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 of the International Civil Aviation Organization (ICAO). The owner/operator of this aircraft must obtain written permission from another country's Civil Aviation Authority (CAA) prior to operating this aircraft in or over that country. That written permission must be carried aboard the aircraft together with the U.S. airworthiness certificate and, upon request, be made available to an FAA inspector or the CAA in the country of operation.

* (22) No person shall operate this aircraft unless within the preceding 12 calendar months it has had a condition inspection performed in accordance with the scope and detail of appendix D to part 43, or other FAA-approved programs, and is found to be in a condition for safe operation. As part of the condition inspection, cockpit instruments must be marked appropriately and needed placards installed in accordance with § 91.9. In addition, system essential controls must be in good condition, securely mounted, clearly marked, and provide for ease of operation. This condition inspection will be recorded in the aircraft maintenance records.

(23) Condition inspections shall be recorded in the aircraft maintenance records showing the following or a similarly worded statement: **"I certify that this aircraft has been inspected on (insert date) in accordance with the scope and detail of appendix D to part 43 and found to be in a condition for safe operation."** The entry will include the aircraft total time in service, and the name, signature, certificate number, and type of certificate held by the person performing the inspection.

NOTE: Limitations 24 and 25 will be issued in lieu of limitations 22 and 23 for turbine powered amateur-built aircraft.

(24) This aircraft shall not be operated unless it is inspected and maintained per an inspection program selected, established, identified, and used as set forth in § 91.409(e), (f), (g), and (h). This inspection shall be recorded in the aircraft maintenance records.

(25) Inspections shall be recorded in the aircraft maintenance records showing the following or a similarly worded statement: **"I certify that this aircraft has been inspected on (insert date) in accordance with the scope and detail of the (identify program title) FSDO approved program (insert date) and found to be in a condition for safe operation."** The entry will include the aircraft total time in service (cycles if appropriate), and the name, signature, certificate number, and type of certificate held by the person performing the inspection.

(26) An experimental aircraft builder certificated as a Repairman for this aircraft under § 65.104, or an appropriately rated FAA certificated mechanic, may perform the condition inspection required by these operating limitations.

(27) Application must be made to the geographically responsible FSDO or MIDO for any revision to these operating limitations.

(28) The pilot in command of this aircraft shall notify air traffic control of the experimental nature of this aircraft when operating into or out of airports with an operational control tower. When filing IFR, the experimental nature of this aircraft shall be listed in the remarks section of the flight plan.

135. RESERVED.